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DATE MAILED: 10/18/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,654	01/27/2004	Younger Ahluwalia	03137.000005	3974
5514 75	590 10/18/2006		EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			RUDDOCK, ULA CORINNA	
• • • • • • • • • • • • • • • • • • • •	30 ROCKEFELLER PLAZA NEW YORK, NY 10112		ART UNIT	PAPER NUMBER
11211 10141,			1771	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	$\overline{}$
	10/766,654	AHLUWALIA ET AL.	/
Office Action Summary	Examiner	Art Unit	
	Ula C. Ruddock	1771	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet	with the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may vill apply and will expire SIX (6) MC cause the application to become	IICATION. a reply be timely filed  DNTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on <u>02 Au</u> This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.	-	;
Disposition of Claims			
4) □ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) □ Claim(s) 1-21 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or Application Papers  9) □ The specification is objected to by the Examiner 10) □ The drawing(s) filed on is/are: a) □ access Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction in the oreal states.  11) □ The oath or declaration is objected to by the Examiner	relection requirement.  r.  epted or b) objected to drawing(s) be held in abeyon is required if the drawing.	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(c	1).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in ity documents have bee (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 9/21/06.	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application	

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#### **DETAILED ACTION**

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1. The Examiner has carefully considered Applicant's response filed August 2, 2006. The previously set forth rejections have been maintained.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Langer (US 4,600,634). Ahluwalia disclose a structural article used in a wide variety of products including fire walls, vapor barriers, roofing underlayment, and facing sheets (col 3, In 34-42). The articles comprise a substrate having an ionic charge which is coated with a coating having essentially the same ionic charge. The coating consists of a filler material and a binder material. The binder comprises an acrylic latex, specifically Hycar 2679 (col 3, In 5-9). It should be noted that Hycar 2679 polymer emulsion contains synthetic soap, sometimes known as surface active agents or surfactants (col 7, In 16-19), thus meeting Applicant's limitation of a surfactant component. Furthermore, because a surfactant is present in Ahluwalia's composition, surfactant-generated microcells would also be present in the material. The substrate is preferably fiberglass and the filler is selected from fly ash, charged calcium carbonate, and ceramic microspheres. The binder is preferably acrylic latex (abstract) or SBR latex (col 3, ln 11-12). Ahluwalia further discloses that it is well known to include clay as a filler material in structural articles in the building industry (col 1, In 12-26). The articles are planar in shape and the substrate is coated on one side or both sides depending on the intended application (col 3, ln 42-44). The

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structural material may be coated on one or both sides with a water repellent material, an algaecide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and a coloring dye (col 3, ln 54-67 to col 4, ln 1-3). The structural article contains 10-25% by weight glass fibers (claim 13) and the coating comprises nearly 85% by weight of the article (col 3, ln 17-18). Ahluwalia discloses the claimed invention except for the teaching that a metallic component is adhered to the coated substrate on one or both sides of the substrate.

Langer (US 4,600,634) discloses flexible fibrous endothermic sheet materials for fire protection. The flexible sheet is made of fiberglass and acrylic binder and is useful in building construction (abstract). Fillers useful in the composition include alumina trihydrate (col 3, ln 59). A backing, comprising an aluminum foil, is added to the backing of the sheet material to give an added degree of strength to the sheet material (col 4, ln 8-10). It would have been obvious to one having ordinary skill in the art to have added Langer's aluminum sheet to one or both sides of the coated substrate of Ahluwalia, motivated by the desire to create a structural article with increased strength and durability.

#### Rejection is maintained.

#### Response to Arguments

4. Applicant's arguments filed August 2, 2006, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the Ahluwalia reference teaches away from surfactant generated microcells because Ahluwalia discloses the use of defoaming agents. This argument is not persuasive because the present invention, at paragraph [0054] of the specification, also discloses the use of defoaming agents. Therefore, the Examiner maintains the

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position that the use of Hycar 2679, as shown by Ahluwalia, would generate microcells despite the use of defoaming agents. This reasoning is based upon the fact that Applicant's present invention discloses surfactant generated microcells despite the use of defoaming agents. Therefore, the rejection is maintained.

### Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UCR WW

Ula C. Ruddock Primary Examiner

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